

What is claimed is:

1. A method utilizing multiple network interfaces, comprising:  
receiving a first network data to be transmitted by a first network interface

according to a protocol;

5 determining whether the first network interface supports the protocol;

if the protocol is not supported, then providing said first network data to a  
second network interface for processing of said first network traffic into a second  
network data according to the protocol; and

transmitting said second network data with said first network interface.

10 2. The method of claim 1, wherein the first network interface does not  
support the protocol, the method further comprising:

presenting said first and second network interfaces to a protocol stack as  
being a homogeneous team of network interfaces.

15 3. The method of claim 1, wherein the protocol includes encrypting the  
first network data before submitting said first network data to a network.

20 4. The method of claim 1, further comprising:  
communicatively coupling a hardware-based encryption processor with  
said second network interface, said encryption processor performing said processing of  
said first network traffic.

5. The method of claim 4, wherein the hardware-based encryption processor supports a primary mode for encrypting network traffic for said second network interface, and a secondary mode for encrypting network traffic for said first network interface.

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6. The method of claim 5, wherein the said first and second network interfaces operate in an adaptive load balancing mode, and wherein said second network interface interleaves said primary mode encryption with said secondary mode encryption.

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7. The method of claim 6, further comprising:  
providing a third network interface supporting the protocol;  
wherein processing said first network traffic into said second network data is balanced across said second and third network interfaces.

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8. The method of claim 7, wherein said balancing is performed according to a workload of said second and third network interfaces.

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9. The method of claim 5, wherein the said first and second network interfaces operate in an adapter fault tolerance mode, and wherein said first network interface is a primary network interface, and said second network interface is a backup network interface.

10. The method of claim 1, wherein the said first and second network interfaces operate in an adaptive load balancing mode, and wherein said second network interface interleaves processing network traffic for said second network interface with processing said first network traffic into said second network data.

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11. The method of claim 1, wherein the said first and second network interfaces operate in an adapter fault tolerance mode, and wherein said first network interface is a primary network interface, and said second network interface is a backup network interface.

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12. A readable medium having encoded thereon instructions capable of directing a processor to:

receive a first network data to be transmitted by a first network interface according to a protocol;

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determine whether the first network interface supports the protocol; if the protocol is not supported, then provide said first network data to a second network interface for processing of said first network traffic into a second network data according to the protocol; and

transmit said second network data with said second network interface.

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13. The medium of claim 12, wherein the protocol includes encrypting the first network data before submitting said first network data to a network.

14. The medium of claim 12, said instructions including further instructions to direct said processor to:

process said first network traffic into said second network data with a hardware-based encryption processor communicatively coupled with said second network interface.

15. The method of claim 14, wherein the hardware-based encryption processor supports a primary mode and a secondary mode, said instructions including further instructions to direct said processor to:

encrypt network traffic for said second network interface when said encryption processor is in said primary mode; and

encrypt network traffic for said first network interface when said encryption processor is in said secondary mode.

16. The method of claim 15, wherein said first and second network interfaces operate in an adaptive load balancing mode, and wherein said second network interface interleaves said primary mode encryption with said secondary mode encryption.

17. The method of claim 16, in which a third network interface supports the protocol, said instructions including further instructions to direct said processor to:

balance processing said first network traffic into said second network data across said second and third network interfaces.

18. The method of claim 17, wherein said balancing is performed according to a workload of said second and third network interfaces.

5 19. The method of claim 15, wherein said first and second network interfaces operate in an adapter fault tolerance mode.

10 20. In a computing device, a network interface team, comprising:  
a first network interface lacking support for a protocol; and  
a second network interface supporting the protocol. said second network interface configured to process network traffic for the first network interface if said network traffic is to be transmitted according to the protocol.

15 21. The network interface team of claim 20, further comprising:  
a first receiver, communicatively coupled to said first network interface, for receiving network traffic to be transmitted by said first network interface;  
a second receiver, communicatively coupled to said second network interface, for receiving network traffic to be transmitted by said second network interface; and  
20 a transferor, communicatively coupled with said first network interface and said second receiver, and configured to transfer network traffic to said second network interface for processing according to the protocol.

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